

## IN THE CLAIMS

1. (original) A method for analyzing defect information on a substrate, the method comprising the steps of:

inspecting the substrate to identify individual defect events, including at least one of defects, defective pixels, and defective dice,

classifying the individual defect events into event patterns, include at least one of defect clusters and spatial signatures,

comparing the event patterns to a list of patterns of interest,

logically dividing the substrate into zones,

identifying the zones in which the patterns of interest exist on the substrate,

comparing the identified zones to a list of zones of interest,

identifying combinations of (1) patterns of interest on the substrate that (2) reside within zones of interest on the substrate, and

comparing the identified combinations to a list of predetermined combinations that are associated with defect causes, and

specifying at least one substrate defect cause based at least in part on matches between the identified combinations and the predetermined combinations and the associated defect causes

~~detecting defects on the substrate to produce the defect information;~~

~~analyzing the defect information from the substrate on a zone-by-zone basis to produce defect level classifications for the defects within each zone; and~~

~~analyzing the zonal defect level classifications according to at least one analysis method.~~

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